



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

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MINERALS PROGRAM
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Executive Secretary

October 11, 1996

Rex Rowley
Bureau of Land Management
House Range Resource Ares
35 East 500 North, P.O. Box 778
Fillmore, UT 84631

Dear Mr. Rowley:

Subject: Jumbo Mining Company Amended Plan of Operations, September 16, 1996

We have reviewed Jumbo Mining Company's amended Plan of Operations (POO) for the Drum Mine in Millard County, Utah. This amended plan does not satisfactorily address the Division of Water Quality's (DWQ) concerns regarding potential ground water pollution originating at this site.

We have had information that the existing leach pads have caused a discharge of pollutants to the shallow perched ground water zone at the site since 1990. Despite repeated requests to stop this discharge, neither Jumbo nor Western States Minerals have taken any action to remedy the situation. As you know, recent inspections of the site have revealed that the leach pad liners, pipelines and related structures have deteriorated and no longer provide adequate containment of pollutants leached from the ore heaps.

Jumbo's amended POO does not assure us that any reasonable effort will be made to stop the discharge of contaminants from the pads or to demonstrate that doing so would not be necessary. In the POO Jumbo proposes to evaluate the chemistry of water discharged from the heaps by sampling storm draindown. While this approach could work with leach pads that had intact liners and pipelines, there is a significant possibility that sampling the inflow to the preg pond, as Jumbo proposes, would not yield a sample representative of the actual discharge to the subsurface, given the deteriorated condition of the facilities at the Drum Mine site. Stormwater, which reported to the pad's trenches and pipelines, could be a sample biased towards those parts of the pad which have already been leached by precipitation over six years of inactivity. A more highly concentrated solution could be discharged through holes in the bottom liner. Some other method would need to be used to evaluate this possibility before we could agree that the pads

DIVISION OF WATER QUALITY



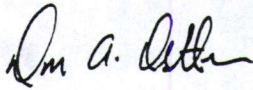
Mr. Rex Rowley
October 11, 1996
Page 2

pose no further danger to ground water. Jumbo also proposes to monitor the shallow perched saturated zone near the leach pad site. This zone, however, is localized and information we have on file suggests it does not cover the entire area of the leach pads. Monitoring this zone could only provide a partial answer as to whether the leach pads are leaking. The drill holes Jumbo has been using to monitor this zone have not been completed as monitor wells of adequate construction to sample for a contaminant like cyanide, which could be affected by volatilization.

It has been DWQ's position that rather than doing expensive and potentially unsuccessful studies to demonstrate that no problem exists, the responsible parties in this case should use their resources to perform reclamation which will minimize discharges from the heaps. We have asked the operators numerous times over the past six years to address this problem and nothing has been done. Presumably contaminants have continued to spread in the subsurface over this time, and containment facilities at the mine have deteriorated, allowing even more contaminants to be released. Given the operators' history at this site, we support any efforts or actions you may take to move this towards resolution without further delay.

Please contact Mark Novak at (801)538-6518 of this office if you have any questions.

Sincerely,



Don A. Ostler, P.E.
Director

DAO:MN:wfm

cc: Wayne Hedberg, DOGM
Tom Mitchell, Attorney General
Ed King, Jumbo Mining
Allan Czerny, Western States Minerals
Central Utah Health Dept.
Roger Foisy, District Engineer

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FILE:JUMBO MINING, DRUM MINE

